

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/665,562 Confirmation No. : 6165  
First Named Inventor : Shigeaki MATSUBARA  
Filed : September 22, 2003  
TC/A.U. : 3662  
Examiner : J.B. Sotomayor

Docket No. : 056205.52780US  
Customer No. : 23911

Title : Automotive Radio Wave Radar and Signal Processing

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.97 AND 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached Form PTO-1449 and/or listed herein and which the Examiner may deem relevant to patentability of the claims of the above-identified application.

**CONCISE EXPLANATION OF  
NON-ENGLISH LANGUAGE DOCUMENTS**

An English abstract of Japanese Publication No. 07-043453 and WIPO Publication No. WO/01/55745 A1 are submitted here with.

The present Information Disclosure Statement is being filed without a Certification under 37 C.F.R. § 1.97(e) after the later of three months from the application's filing date and the mailing date of the first Office Action on the merits, but before a Final Office Action or Notice of Allowance (whichever is earlier), and therefore a check for the fee of \$180.00 under 37 C.F.R. § 1.17(p) is attached. Please charge any necessary fee or credit any overpayment in

05/03/2005 JADD01 00000043 10665562

01 FC:1806

180.00 0P

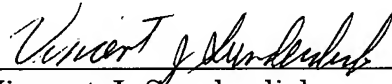
connection with this Information Disclosure Statement to Deposit Account No. 05-1323.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

If necessary, the paper should be considered as a petition for consideration of the Information Disclosure Statement under 37 C.F.R. § 1.97(d)(2) and that the petition fee set forth in 37 C.F.R. § 1.17(i) in accordance with 37 C.F.R. § 1.97(d)(3) should be charged to Deposit Account 05-1323, Attorney Docket No.: 056205.52780US.

Respectfully submitted,

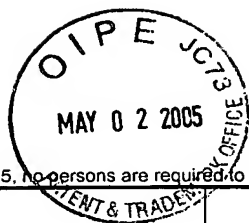
May 2, 2005

  
\_\_\_\_\_  
Vincent J. Sunderdick  
Registration No. 29,004

CROWELL & MORING LLP  
Intellectual Property Group  
P.O. Box 14300  
Washington, DC 20044-4300  
Telephone No.: (202) 624-2500  
Facsimile No.: (202) 628-8844  
VJS:ddd

Enclosures: Form PTO-1449

#373605



PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|   |  |                          |                    |
|---|--|--------------------------|--------------------|
| <b>Substitute for form 1449A/PTO</b><br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(use as many sheets as necessary)<br><br>Sheet 1 of 1 |  | <b>Complete if Known</b> |                    |
|   |  | Application Number       | 10/665,562         |
|   |  | Filing Date              | September 22, 2003 |
|   |  | First Named Inventor     | Shigeaki MATSUBARA |
|   |  | Art Unit                 | 3662               |
|   |  | Examiner Name            | J.B. Sotomayor     |
|   |  | Attorney Docket Number   | 056205.52780US     |

| U.S. PATENT DOCUMENTS |                       |   |                                |  |   |
|-----------------------|-----------------------|---|--------------------------------|--|---|
| Examiner Initials*    | Cite No. <sup>1</sup> | Document Number<br>Number-Kind Code <sup>2</sup> (if known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                       | AA                    | US- 6,703,967 B1  | 03-09-2004                     | Kuroda et al.                                      |   |

| FOREIGN PATENT DOCUMENTS |                       |  |                                |  |   |                |
|--------------------------|-----------------------|--|--------------------------------|--|---|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document<br>Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document                     | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear | T <sup>6</sup> |
|                          | AB                    | WO 01/55745 A1   | 08-02-2001                     | Hitachi, LTD.  |   | ✓              |
|                          | AC                    | JP 07-043453   | 02-14-1995                     | Tech Res & Dev Inst of Japan Def<br>Agency<br>Mitsubishi Electric Corp |   | ✓              |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials*              | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                                 |                       |   |                |

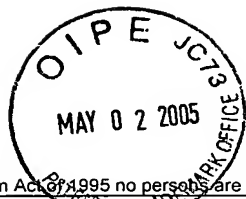
|                    |  |                 |  |
|--------------------|--|-----------------|--|
| Examiner Signature |  | Date Considered |  |
|--------------------|--|-----------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

#373617



Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number

Effective on 12/06/2004  
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT (\$)** 180

### Complete if Known

|                      |                    |
|----------------------|--------------------|
| Application Number   | 10/665,562         |
| Filing Date          | September 22, 2003 |
| First Named Inventor | Shigeaki MATSUBARA |
| Examiner Name        | J.B. Sotomayor     |
| Art Unit             | 3662               |
| Attorney Docket No.  | 056205.52780US     |

### METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify):  
☒ Deposit Account Deposit Account Number: **05-1323 (Docket No. 056205.52780US)** Deposit Account Name: **23911**  
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)  
☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee  
☒ Charge any additional fee(s) or underpayments of fee(s) ☒ Credit any overpayments  
under 37 CFR 1.16 and 1.17

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

### FEE CALCULATION

#### 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

| Application Type | FILING FEES |                       | SEARCH FEES |                       | EXAMINATION FEES |                       | Fees Paid (\$) |
|------------------|-------------|-----------------------|-------------|-----------------------|------------------|-----------------------|----------------|
|                  | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)         | Small Entity Fee (\$) |                |
| Utility          | 300         | 150                   | 500         | 250                   | 200              | 100                   |                |
| Design           | 200         | 100                   | 100         | 50                    | 130              | 65                    |                |
| Plant            | 200         | 100                   | 300         | 150                   | 160              | 80                    |                |
| Reissue          | 300         | 150                   | 500         | 250                   | 600              | 300                   |                |
| Provisional      | 200         | 100                   | 0           | 0                     | 0                | 0                     |                |

#### 2. EXCESS CLAIM FEES

| Fee Description   | Fee (\$) | Small Entity Fee (\$) |
|---|----------|-----------------------|
| Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent            | 50       | 25                    |
| Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent | 200      | 100                   |
| Multiple dependent claims   | 360      | 180                   |

**Total Claims** -20 or HP **Extra claims** x **Fees(\$)** = **Fee Paid (\$)**

HP = highest number of total claims paid for, if greater than 20

**Indep. Claims** - 3 or HP **Extra claims** x **Fees(\$)** = **Fee Paid (\$)**

HP = highest number of total claims paid for, if greater than 3

#### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

**Total Sheets** - 100 = **Extra Sheets** / 50 = **Number of each additional 50 or fraction thereof** **Fee (\$)** **Fee Paid (\$)**

Round up to a whole number x

#### 4. OTHER FEES

Non-English Specification, \$130 fee (no small entity discount)

**Other:** Information Disclosure Statement

**Fee Paid (\$)**

**\$180.00**

### SUBMITTED BY

|                   |                              |  |                          |
|-------------------|------------------------------|--|--------------------------|
| Signature         | <i>Vincent J. Sunderdick</i> | Registration No. (Attorney/Agent) 29,004 | Telephone (202) 624-2500 |
| Name (Print/Type) | Vincent J. Sunderdick        | Date                                     | May 2, 2005              |

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.